

Application No. 09/857,096
Attorney Docket No. 11721US02

LISTING OF CLAIMS

Claims 1-19. (Canceled).

20. (Currently Amended) A method of generating replacement data for different types of communication transmitted over a communication network, the method comprising:

detecting ~~the type of~~ a communication type of a communication, wherein said communication type is one of a plurality of detectable communication types;

adjusting at least a first value in response to ~~the detecting said communication type;~~ said communication type; and

fluctuating a plurality of registers pseudo-randomly between ~~the said~~ first value and a second value to generate an output value.

21. (Previously Presented) The method of claim 20 wherein the first value comprises a positive sign and a magnitude and wherein the second value comprise a negative sign and the magnitude and wherein the fluctuating comprises fluctuating pseudo-randomly between the positive sign and the negative sign.

22. (Previously Presented) A method of claim 21 wherein the fluctuating comprises:

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storing the magnitude in a multi-bit register;
generating the positive sign and the negative sign using a linear feedback shift register; and
providing one of the positive sign and negative sign in conjunction with the magnitude as the output value.

23. (Previously Presented) The method of claim 20 wherein the types of communication comprises two or more of voice communication, facsimile communication and modem communication.

24. (Previously Presented) The method of claim 20 wherein the replacement data comprises white noise data.

25. (Previously Presented) The method of claim 20 wherein the communication network comprises a packet network.

26. (Previously Presented) The method of claim 25 further comprising:
receiving data packets from the packet network;
detecting lost data packets and producing in response a lost data output indicating when replacement data needs to be provided;
removing overhead information from the data packets to produce output data; and

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inserting the output value in response to the lost data output.

27. (Currently Amended) Apparatus for generating replacement data for different types of communication transmitted over a communication network, the apparatus comprising:

means for detecting ~~the type of a~~ a communication type of a communication, wherein said communication type is one of a plurality of detectable communication types;

means for adjusting at least a first value in response to the said detected type of communication; and

means for fluctuating a plurality of registers pseudo-randomly between the said first value and a second value to generate an output value.

28. (Previously Presented) The apparatus of claim 27 wherein the first value comprises a positive sign and a magnitude and wherein the second value comprise a negative sign and the magnitude and wherein the means for fluctuating comprises means for fluctuating pseudo-randomly between the positive sign and the negative sign.

29. (Previously Presented) The apparatus of claim 28 wherein the means for fluctuating comprises:

multi-bit register means for storing the magnitude;

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linear feedback shift register means for generating the positive sign and negative sign; and

means for providing one of the positive sign and negative sign in conjunction with the magnitude as the output value.

30. (Previously Presented) The apparatus of claim 27 wherein the types of communication comprise two or more of voice communication, facsimile communication and modem communication.

31. (Previously Presented) The apparatus of claim 27 wherein the replacement data comprises white noise data.

32. (Previously Presented) The apparatus of claim 27 wherein the communication network comprises a packet network.

33. (Previously Presented) The apparatus of claim 32 further comprising:
means for receiving data packets from the packet network;
means for detecting lost data packets and producing in response a lost data output indicating when replacement data needs to be provided;
means for removing overhead information from the data packets to produce output data; and

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means for inserting the output value in response to the lost data output.

34. (Currently Amended) Apparatus for generating replacement data for different types of communication transmitted over a communication network, the apparatus comprising:

an echo canceller arranged to detect a communication type of an incoming communication, wherein said communication type is one of a plurality of communication types detectable by said echo canceller;

a register control arranged to adjust at least a first value in response to ~~the~~ detecting said communication type; and

a plurality of registers arranged to fluctuate pseudo-randomly between the said first value and a second value to generate an output value.

35. (Previously Presented) The apparatus of claim 34 wherein the first value comprises a positive sign and a magnitude and wherein the second value comprises a negative sign and the magnitude and wherein the registers fluctuate pseudo-randomly between the positive sign and the negative sign.

36. (Previously Presented) The apparatus of claim 35 wherein the registers comprise a linear feedback shift register arranged to fluctuate pseudo-randomly between the positive sign and the negative sign and a second register arranged to store magnitude

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so that one of the positive sign and negative sign is provided in conjunction with the magnitude as the output value.

37. (Previously Presented) The apparatus of claim 34 wherein the echo canceller is arranged to detect two or more of voice communication, facsimile communication and modem communication.

38. (Previously Presented) The apparatus of claim 34 wherein the replacement data comprises white noise data.

39. (Previously Presented) The apparatus of claim 34 wherein the communication network comprises a packet network.

40. (Previously Presented) The apparatus of claim 39 further comprising:
a lost packet unit arranged to receiving data packets from the packet network, to detect lost data packets and to produce in response a lost data output indicating when replacement data needs to be provided;
a data processing unit arranged to remove overhead information from the data packets to produce output data; and
a data payout unit arranged to insert the output value in response to the lost data output.